

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/000745

## A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. 7: C12P 01/02, 07/64; C11B 01/00, 03/00; A61K 31/23, 31/20, 35/12, 35/78

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
WPAT, Japio, CAPlus, Medline (fungal lipas-/lypolytic), lipase, lipolytic, lipid/oil/fat, fung\*,  
(emu/ostrich/macadamia), (inflammat-/antiinflammat-), (arthritis/asthma/crohn/ulcer)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	Papanikolaou S et al., (2002), Appl Microbiol Biotechnol, vol. 58, pp 308-312. 'Single cell oil production by <i>Yarrowia lipolytica</i> growing on an industrial derivative of animal fat in batch cultures'. Whole document.	1-6 7-15
X	Lazar G and Schroder FR (1992) Microbial degradation of natural products, pp 267-291, ed Winkelmann G., publisher: VCH, Weinheim, Germany Whole document.	1-6
X	EP 0 117 087 B1 (SUNTORY LTD) 16 June 1987 Whole document.	1-6

☒ Further documents are listed in the continuation of Box C

☒ See patent family annex

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  
13 August 2004

Date of mailing of the international search report

18 AUG 2004

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	Ghosh PK et al., (1996) Science Progress, vol 79(2), pp 119-157. 'Microbial lipases: production and applications'. Whole document.	1-6 7-15
A	Magan N et al., (1993) International Journal of Food Microbiology, vol 19, pp 217-227. 'Lipolytic activity and degradation of rapeseed oil and rapeseed by spoilage fungi'. Whole document.	1-6
A	Okumura S et al., (1979) Biochimica et Biophysica Acta, vol 575, pp 156-165. 'Synthesis of various kinds of esters by four microbial lipases'. Whole document.	1-6
A	Gandhi N. (1997) JAOCS, vol 74(6), pp 621-634. 'Applications of lipase'. Whole document.	1-15
A	Pandey, A et al., (1999) Biotechnol Appl Biochem, vol 29, pp 119-131. 'The realm of microbial lipases in biotechnology'. Whole document.	1-15
A	US 5,431,924 A (Ghosh et al.) 11 July 1995 Whole document.	7-15
A	US 4,485,173 A (Gierhart) 27 November 1984 Whole document.	1-6

# INTERNATIONAL SEARCH REPORT

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## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☒ Claims Nos.: 7-15  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  
Claim 7 defines a method of treating inflammatory conditions using a biologically active oil or extract where the oil or extract is prepared by fungal metabolism/transformation of a lipid substrate. The scope of this claim is so broad and unclear that the search has been restricted to encompass the features of claim 1 as these are regarded as the essential features which define the invention.
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2004/000745

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report				Patent Family Member			
EP	0117087	AU	23812/84	AU	23816/84	CA	1247011
		EP	0116439	JP	59141514	JP	59141515
		JP	59152307	JP	59152308	JP	59172410
		JP	59172411				
US	5431924	AU	89452/91	CA	2096242	EP	0560806
		WO	9208470				
US	4485173	AR	231307	AU	78641/81	CA	1174619
		DE	3201427	GB	2091286	JP	57144987
		NZ	199218				
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.							
END OF ANNEX							